



The LongPath

A North Alabama DX Club Publication

Special points of interest:

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From the President

Well, lots to talk about this month! We just had a hamfest. N4BCD tells me there was some growth – we'll know a lot more very soon. I've been involved in the hamfest, in one way or another, for over 15 years. I can tell you there were many welcome changes this year – much to my own enjoyment.

We also had a DX Banquet. I've done them before. There are always lessons learned, and I took more than a few hits on this one. But overall, the speaker was great; the ARRL leadership was present in force; there were almost 30 door prizes, most of them VERY valuable; the DX contest produced about 35 guests with over 340 DX entities; and we sold 116 tickets. The last time I was involved in the banquet, we were lucky to sell 75 tickets. What has happened!! That's growth, friends, and it is truly exciting to be a part of it. There are just more of us here who want to pitch in and get involved. More people involved equals more fun for all.

ARRL Past President Joel Harrison told us a little regarding how he got his DXCC totals so high, and then "What is Wrong (NOT) with Ham

Radio Today." Then he lost the DXCC contest to current ARRL President Rick Roderick, K5UR, whose current total is at 372!

September marks an important change of season for us. Later in the month we'll see the start of both the next contest and DX seasons. So now it's antenna season, and it will be coming to a close, so get those antennas ready.

Coming up also is our picnic season, which will be held on October 12 at the QTH of Bruce Smith, AC4G. Bruce is a Top of the Honor Roll guy, so this will be a good chance to learn and lunch. Bruce will also present our September program, and will be able to fill in the picnic details.

A few days after the picnic our own Steve, AG4W, will be shipping out to Cape Verde for the CQ WW phone contest. This should be beyond exciting, so come on out to the picnic and hear what Steve is thinking before the contest.

End of year preparations need to start now. I have scheduled our annual Christmas party at

Cont'd on p. 2

How to Join

- * Come to a club meeting;
- * or send in an application by mail (form on www.NADXC.org)
- * or call Tom Duncan at (256)705-2147

Meet AC4G

September Program by Bruce Smith, AC4G

Our NADXC Picnic on October 12th will be at the QTH of Bruce Smith, AC4G. If our club's members were measured on a VU meter, we would find that some are around +20 dB most of the time, while others barely wiggle the needle. Bruce is one of the latter. Bruce's September program will bring us up-to-date on his ham career past-and-present, the state of his impressive station, and we hope a map to it Taft, TN.

Get to Newk's a little past 5:30 pm for dinner, the business meeting starting around 6:30, and Bruce's program no later than 7:00.



August Meeting Minutes

By Chris Reed, AI4U, NADXC Secretary/Treasurer

Bob called the meeting to order at 630pm.

New Members

Membership approved for Tim Large, KY4TT.

Welcomed KQ4VT, Jared Cassidy to the meeting and back to active member status.

Announcements

Chris provided update on Financial report. After deposits from banquet tickets and new members the bank balance is over \$13,000.

There are just a few tickets remaining for the banquet.

Art, N4UC announced he had achieved DXCC on 30 meters.

Mark, N4BCD provided a Hamfest update:

- Over 100 volunteers
- 39 Forums
- Larger Youth Activity Lounge
- Hospitality plans to welcome guests
- Multiple Ham Radio podcast and Media will be at the hamfest and they have promoted the hamfest

on their respective programs.

- Dayton and Orlando will be at Hamfest.

The Alabama Youth plaque for 2019 goes to Marissa Robledo. The DX club sponsors the plaque.

On October 12, AC4G will host this year's DX picnic at his family's farm in Taft TN.

A discussion ensued regarding funding

Cont'd on page 3

Power Amplifier Efficiency

Soon we will move into contest season, and given the less-than-stellar average propagation conditions, perhaps many hams who would just as soon run low power will be turning on their amps. Not just to warm up the shack on cold winter nights: early on in the season excess heat might even be annoying.

For hams amplifier efficiency is an interesting but rarely mission critical concern, while for some the cost of electricity, scarcity of electrical power, and heat removal are important issues. William Doherty of Bell Labs addressed this for high-power AM broadcast transmitters in 1936, at which time Western Electric (also part of Ma Bell) was in the broadcasting business. Doherty's approach was to handle "low power" and "high power" as a function of modulation level, with different portions of the power amp.

More than a decade earlier, Marius Latour and Henri Chireix took an entirely different approach by adding odd harmonics of the carrier, thereby approaching a square wave which may be amplified much more efficiently than a

sinusoid, and removing these harmonics on the output side, later branded by RCA the Amplitube system. Today, we read a lot about class E and F "harmonically tuned" amplifiers leveraging this method.

Those interested in this topic may wish to read "High-Efficiency Power Amplifiers: Turning the Pages of Forgotten History" by Andrei Grebennikov available at semanticscholar.org. You'll be amazed I'm sure to find that Dr. Grebennikov is with Alcatel-Lucent Bell Labs in Ireland. His writings are not limited to "...forgotten history", but include many technical articles on power amplifiers and their efficiency.

When it comes time to replace that old hollow-state fire-breathing workhorse with something running cool-to-the-touch at the legal limit, thank the likes of Doherty, Latour and Chireix for their pioneering work many decades ago, and for today's researchers and practitioners who let us squeeze so many watts out of so few watts in.

Now if propagation would only improve...

From the President

(cont'd from p. 1)

Terranova on the second Tuesday of December at the normal meeting time. So it's Dec 10. Dinner around 5:30, and we won't have much of a program. But we will have to swear in some new officers. That means the vote must take place in Nov, so I need to appoint an election committee at our next meeting. Be ready to raise your hand to volunteer. I'll need 3 club members for the duty. It's not hard.

At the last meeting we voted funding for the ZK3A Tokelau DXpedition (QRV before and during our picnic). The Swains Island DXpedition will likely be the next one out for us. That one will be QRV next spring.

Our next meeting is on Tuesday, September 10, at Newk's on University. Dinner at 5:30; Bruce's program at 6:30. See you there. We'll have another current DX contest, of course. Walt Miller was our surprise winner last month.

73 de Bob, K8KI

DX Contests for September

By Chuck Lewis, N4NM

Worked All Europe (WAE) DX Contest (SSB) 80 -10M

Sept 14, 0000Z to Sept 15, 2400Z

Exchange: RST plus Serial No.

See page 80, Sept. QST and
www.darc.de/referate

Russian cup Digital Contest (DIG), 80 - 10M

Sept 14, 1500Z to Sept 15, 0959Z

Exchange: Serial # plus 4-character grid square

See page 80, Sept QST and
www.qrz.ru/contest/detail

Scandinavian Activity Contest, (CW), 80 - 10M

Sept. 21, 1200Z to Sept. 22 1200Z

Exchange: RST plus Serial #

See page 80, Sept. QST and
www.sactest.net/blog/rules

All Africa International DX Contest, (CW, SSB, Dig.), 160 - 10M

Sept. 21, 1200Z to Sept. 22, 1200Z

Exchange: RS(T) plus Serial #

See page 80, Sept. QST and
www.sarl.org.za

CQ WW RTTY Contest, (DIG), 80 - 10M

Sept 28, 0000Z to Sept 29, 2359Z

Exchange: RST, State/Province, and CQ zone; DX sends RST and CQ zone

See page 80, Sept. QST and
www.cqwwrtty.com

OTHERS:

Don't forget our Alabama QSO Party:

Sep 14, 1500Z to Sep 15, 0300Z

Russian WW Digital Contest, CW/SSB/
DIG,

1200Z, Oct. 5 to 1159Z, Oct. 6

Oceania DX Contest, SSB,

0800Z, Oct. 7 to 0800Z, Oct. 8

Oceania DX Contest, CW,

0800Z, Oct. 5 to 0800Z, Oct. 6

Scandinavian Activity Contest, SSB,

1200Z Oct. 12 to 1200Z Oct. 13



Dates & times often change or are misprinted in the journals. Beware.

Chuck, N4NM

August Meeting Minutes

(cont'd from p. 2)

for Tokolau DXepedition, Mark, N4BCD amended the original motion to donate \$250. The motion carried.

Bob's DX prefix challenge was a tight race between Steve, AG4W and Tom, KG4CUY but Steve won in the end.

Meeting adjourned at 7 pm. AG4W provided the program *Bucket List*.

Next meeting September 10 at 630pm at Newk's on University Drive.

Respectfully submitted,

Chris Reed, AI4U

Treasurer's Report

Chris Reed, AI4U

Aug 1 Balance \$13,290.01

Alabama Youth Plaque \$54.49

Banquet expenses \$3,433.57

Deposit \$270.00

August 31 Balance \$10,071.95

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Chris Reed, AI4U, Minutes

Bob De Pierre, K8KI, From the President

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Vice President **Warren Alford, K4MMW**

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Directors **Tom Duncan, KG4CUY**